#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



# (43) International Publication Date 18 August 2005 (18.08.2005)

## **PCT**

# (10) International Publication Number: WO 2005/075578 A2

(51) International Patent Classification<sup>7</sup>:

C09C 1/00

- (21) International Application Number: PCT/EP2005/000370
- (22) International Filing Date:

15 January 2005 (15.01.2005)

(25) Filing Language:

German

(26) Publication Language:

German

- (30) Priority Data: 10 2004 006 145.9 7 February 2004 (07.02.2004) DE
- (71) Applicant (for all designated States except US): MERCK PATENT GMBH [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HENNEMANN, Alfred [DE/DE]; Am Sonnenberg 23, 64753 Brombachtal (DE). ENTENMANN, Marc [DE/DE]; Am Sandgraben 13, 70734 Fellbach (DE). MÜLLER, Margarete [DE/DE]; Auf der Beune 8, 64389 Münster (DE). BONN-WALTER, Renate [DE/DE]; Buchenlandweg 38, 64295 Darmstadt (DE). HUBER, Adalbert [DE/DE]; Bonnhöfferstrasse 9, 64625 Bensheim (DE). SCHÖNEFELD, Ulrich [DE/DE]; Bahnhofstrasse 61, 64404 Bickenbach (DE).

- (74) Common Representative: MERCK PATENT GMBH; Frankfurter Strasse 250, 64293 Darmstadt (DE).
- (81) Designated states (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated states (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### (54) Title: PARTICLES HAVING A FUNCTIONAL MULTILAYERED STRUCTURE

(57) Abstract: The present invention relates to particles having a functional multilayered structure based on substrates, characterised in that the substrates are coated with one or more layers of one or more polymers and one or more layers of one or more silanes, process for the production thereof, and the use thereof